



## LPS: With Built-in Inverter

### Applications

- Remote areas where grid power supply is non-existent or instable
- Agriculture irrigation, Livestock feeding, Domestic water lifting
- Clear water supply from wells or reservoirs
- Off grid solar pumping system

### Material Features

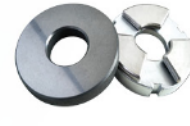
- AISI304 Impeller & Diffuser & Pump shaft
- High precision / strength graphite bearing
- 100% Pure copper winding



Impeller and Diffuser



Top chock



High-strength thrust bearing

### Motor Features

- Permanent magnet brushless synchronous motor - High Efficiency
- Double shield structure with water filled - No pollution risk to drinking water
- Intelligent inverter built inside (Have MPPT and VFD function)
- Built-in Inverter easy to replace



Inverter



Motor



Pump

### Intelligent Inverter

- **MPPT** - Maximum Power Point Tracking function - Save solar panel (Maximizing utilization of power generated by solar panels)
- **VFD** - Variable Frequency Drive function provides Max. Speed 6000rpm
- Can be powered by both AC and DC power supply
- Suitable for Solar panel, Battery, Grid power supply, Generators
- Multi-protection function
- Dry-run protection, Over Current Protection, Phase loss protection, Soft start

### Input Voltage

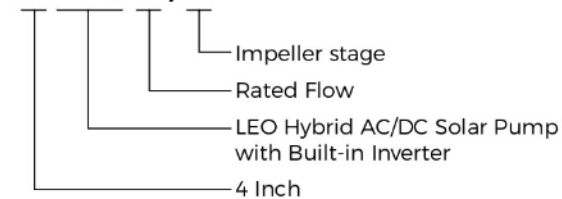
- AC Voltage Range: 1-Phase, 60~300V AC, 50~60Hz
- DC Voltage Range: 60 ~ 400V
- Solar Panel Open Circuit Voltage (VOC): 60 ~ 410V (Without CN400)
- Solar Panel Open Circuit Voltage (VOC): 95 ~ 410V (With CN400)

### Input Power Range

- DC Supply: 0.37 ~ 3kW
- AC Supply: 0.37 ~ 2.2kW

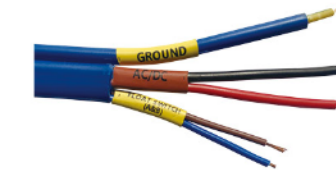
### Identification Codes

4 LPS 2 / 7



Intelligent inverter

## CN400: LPS Series Intelligent Controller



LPS Pump Cable

### Applications

- Designed for LPS series Hybrid AC/DC Solar Pump

### Function

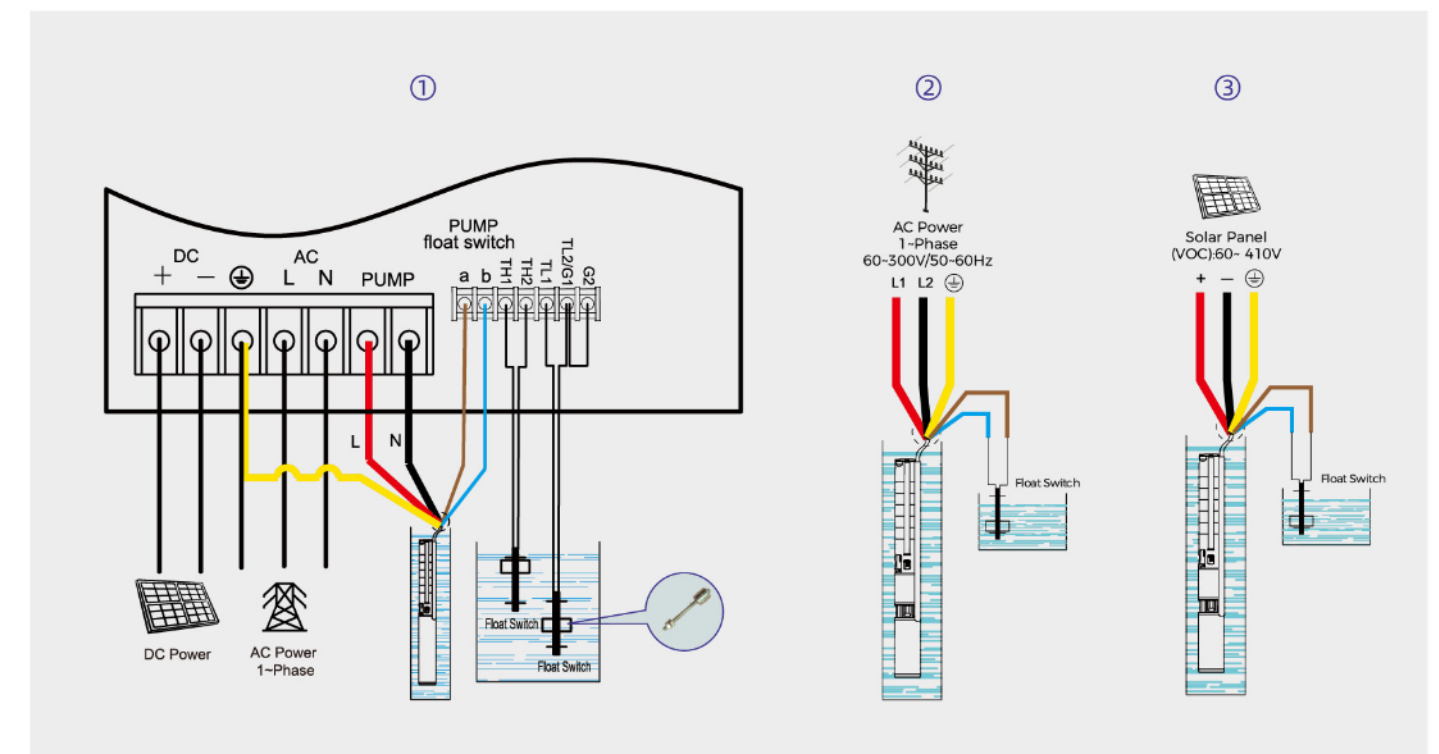
- Auto Switch between AC and DC power supply. (Without CN400 must switch power supply between AC and DC manually)
- Mode setting ① Only DC Mode ② Only AC Mode ③ Auto Mode  
On Auto Mode:  
→ With enough strong DC power, pump only use DC power  
→ With not enough strong DC power, pump only use AC power
- LED screen can show following running status:  
On/Off, Input Power & Voltage & Current, Pump Speed(rpm)
- Remarks: CN400 only provided on request.

### Features

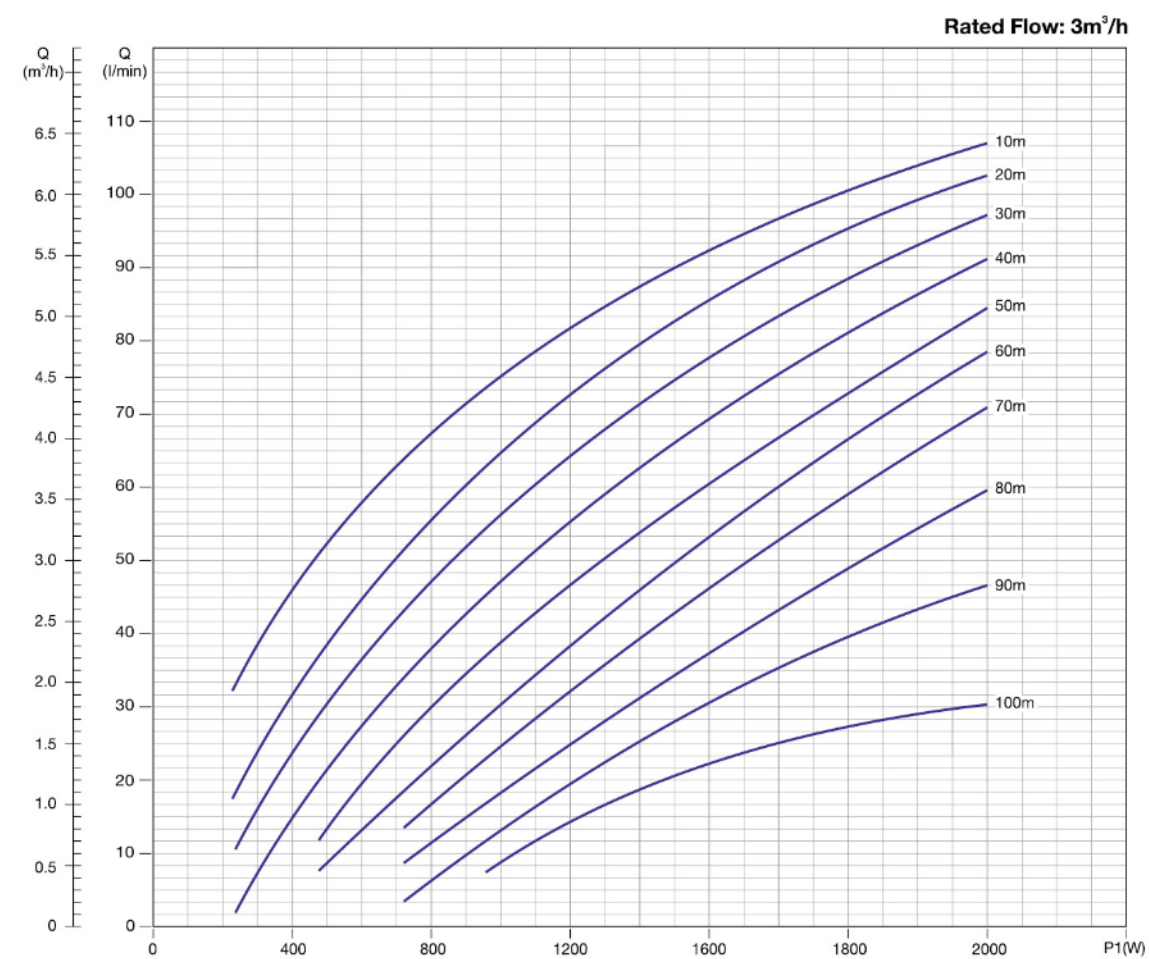
- IP55 Protection class
- 2 Float switch available
- Thickened cast aluminum case
- GPRS remote control function available on request
- Large inner wiring space very easy installation

### Wiring Diagram

- ① With CN400 Controller    ② Only AC power supply    ③ Only DC Power supply



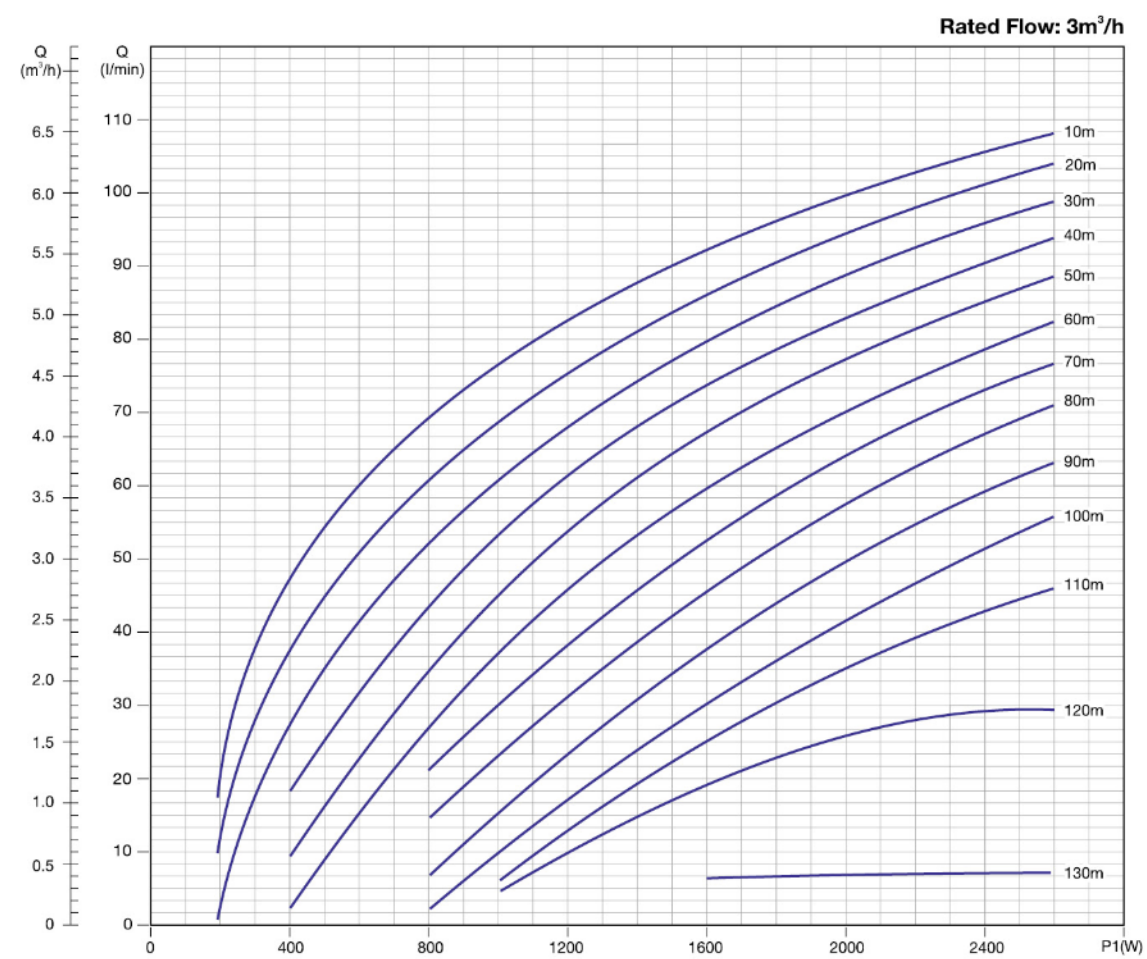
4LPS3/11



Technical Data

| Model            |     | Input Power (W)     |      |      |           |      |          |      |                                         |      |      |
|------------------|-----|---------------------|------|------|-----------|------|----------|------|-----------------------------------------|------|------|
| 4LPS3/11         |     | 200                 | 400  | 600  | 800       | 1000 | 1200     | 1400 | 1600                                    | 1800 | 2000 |
|                  |     | Q(m³/h)             |      |      |           |      |          |      |                                         |      |      |
| H(m)             | 10  | 1.92                | 3.12 | 3.9  | 4.38      | 4.92 | 5.28     | 5.58 | 5.88                                    | 6.12 | 6.42 |
|                  | 20  | 1.08                | 2.4  | 3.3  | 3.9       | 4.38 | 4.86     | 5.22 | 5.52                                    | 5.76 | 6.18 |
|                  | 30  | 0.6                 | 1.62 | 2.64 | 3.36      | 3.9  | 4.38     | 4.74 | 5.1                                     | 5.4  | 5.82 |
|                  | 40  | 0.12                | 1.2  | 1.98 | 2.7       | 3.3  | 3.84     | 4.2  | 4.62                                    | 4.92 | 5.52 |
|                  | 50  | /                   | 0.72 | 1.56 | 2.16      | 2.76 | 3.3      | 3.78 | 4.14                                    | 4.44 | 5.1  |
|                  | 60  | /                   | 0.42 | 1.08 | 1.8       | 2.28 | 2.76     | 3.18 | 3.6                                     | 4.02 | 4.74 |
|                  | 70  | /                   | /    | 0.78 | 1.32      | 1.8  | 2.34     | 2.76 | 3.12                                    | 3.54 | 4.32 |
|                  | 80  | /                   | /    | 0.48 | 1.02      | 1.5  | 1.92     | 2.28 | 2.64                                    | 3.06 | 3.6  |
|                  | 90  | /                   | /    | 0.18 | 0.72      | 1.14 | 1.62     | 1.92 | 2.28                                    | 2.52 | 2.82 |
|                  | 100 | /                   | /    | /    | 0.42      | 0.84 | 1.26     | 1.44 | 1.56                                    | 1.8  | 1.8  |
| Rated Power      |     | 2.0 HP              |      |      | Outlet    |      | 1.25"    |      | MOTOR<br>1~60Hz<br>Automatic adjustment |      |      |
| Max. Input Power |     | 2.2 KW              |      |      | Pump size |      | 4"       |      |                                         |      |      |
| DC Voltage range |     | 60-400 V            |      |      | Max. head |      | 112 m    |      |                                         |      |      |
| AC Voltage range |     | 1×60-300V , 50/60Hz |      |      | Max. flow |      | 6.6 m³/h |      |                                         |      |      |

4LPS3/13



Technical Data

| Model            |     | Input Power (W)     |      |      |           |      |      |          |      |      |                                         |      |
|------------------|-----|---------------------|------|------|-----------|------|------|----------|------|------|-----------------------------------------|------|
| 4LPS3/13         |     | 200                 | 400  | 800  | 1000      | 1200 | 1600 | 1800     | 2000 | 2200 | 2400                                    | 2600 |
|                  |     | Q(m³/h)             |      |      |           |      |      |          |      |      |                                         |      |
| H(m)             | 10  | 1.08                | 3    | 4.2  | 4.68      | 4.98 | 5.52 | 5.76     | 6    | 6.24 | 6.36                                    | 6.48 |
|                  | 20  | 0.6                 | 2.28 | 3.66 | 4.08      | 4.56 | 5.1  | 5.4      | 5.64 | 5.88 | 6.06                                    | 6.24 |
|                  | 30  | 0.06                | 1.62 | 3.18 | 3.66      | 4.14 | 4.8  | 5.04     | 5.34 | 5.58 | 5.76                                    | 5.94 |
|                  | 40  | /                   | 1.14 | 2.58 | 3.12      | 3.66 | 4.38 | 4.74     | 5.04 | 5.22 | 5.4                                     | 5.64 |
|                  | 50  | /                   | 0.54 | 2.1  | 2.64      | 3.18 | 4.02 | 4.32     | 4.68 | 4.98 | 5.1                                     | 5.34 |
|                  | 60  | /                   | 0.12 | 1.68 | 2.16      | 2.7  | 3.54 | 3.96     | 4.26 | 4.56 | 4.74                                    | 4.98 |
|                  | 70  | /                   | /    | 1.26 | 1.74      | 2.22 | 3.12 | 3.42     | 3.84 | 4.14 | 4.32                                    | 4.62 |
|                  | 80  | /                   | /    | 0.9  | 1.2       | 1.68 | 2.58 | 2.88     | 3.3  | 3.72 | 3.9                                     | 4.26 |
|                  | 90  | /                   | /    | 0.42 | 0.9       | 1.32 | 2.04 | 2.46     | 2.82 | 3.18 | 3.36                                    | 3.78 |
|                  | 100 | /                   | /    | 0.18 | 0.48      | 1.08 | 1.8  | 2.16     | 2.46 | 2.76 | 3                                       | 3.36 |
|                  | 110 | /                   | /    | /    | 0.36      | 0.78 | 1.5  | 1.8      | 2.04 | 2.34 | 2.64                                    | 2.76 |
|                  | 120 | /                   | /    | /    | 0.3       | 0.54 | 1.26 | 1.5      | 1.68 | 1.8  | 1.8                                     | 1.74 |
| 130              | /   | /                   | /    | /    | /         | /    | 0.42 | 0.42     | 0.42 | 0.42 | 0.42                                    |      |
| Rated Power      |     | 2.5 HP              |      |      | Outlet    |      |      | 1.25"    |      |      | MOTOR<br>1~60Hz<br>Automatic adjustment |      |
| Max. Input Power |     | 2.6 KW              |      |      | Pump size |      |      | 4"       |      |      |                                         |      |
| DC Voltage range |     | 60-400 V            |      |      | Max. head |      |      | 132 m    |      |      |                                         |      |
| AC Voltage range |     | 1×60-300V , 50/60Hz |      |      | Max. flow |      |      | 7.2 m³/h |      |      |                                         |      |